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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,958	12/04/2001	Sakuya Tamada	09792909-5284	2769

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EXAMINER
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DINH, TAN X

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/006,958

Applicant(s)

TAMADA ET AL.

Examiner

TAN X. DINH

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

- 1) The amendment filed 1/21/2005 is acknowledged.
- 2) The drawings are objected to because *figures 1 and 2* should be designated by a legend such as --PRIOR ART-- since only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The replacement sheet(s) should be labeled "REPLACEMENT SHEET" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures.

If the changes are not accepted by the Examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 3) The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested:

OPTICAL STORAGE MEDIUM HAVING AN ORGANIC RECORDING LAYER  
ATTACHED TO DOUBLE DIELECTRIC LAYERS.

- 4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6) Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over UTSUNOMIYA et al (6,154,437).

UTSUNOMIYA et al discloses an optical disk as claimed in claim 1, comprises a substrate ( Fig.2, substrate 2 ), a data recording layer ( Fig.2, recording layer 4 ), a dielectric part ( Fig.2, dielectric layers 31, 32 ), a light-transmitting layer ( Fig.2, light-transmitting layer 2. In this case, the substrate 2 functions as light-transmitting layer ), wherein data is recorded by applying a laser beam to the data recording layer through the light-

transmitting layer, the dielectric part comprises a *nitride layer contacting the data recording layer* and an *oxide layer* or a *fluoride layer* laid on the nitride layer, and the nitride layer has a thickness of at most 10nm ( see column 9 , line 49 to column 10, line 20 ), except to specifically show that the recording layer is organic material and the light-transmitting layer adhered to dielectric part with an adhesive agent. It would have been obvious to someone within the level of skill in the art at the time of the invention was made to use an organic recording layer and adhered the light-transmitting layer to dielectric layer by an adhesive agent as claimed, the rationale is as follows:

(i) The organic recording layer are old and widely used in the optical recording art for storing information data ( see MASUHARA, US 6,440,333, column 7, lines 58-67; MAEDA et al, US 5,371,730, figure 7, organic recording layer 3, column 12, lines 47-67; ESHO et al, US 4,504,548, abstract, etc., ) and

(ii) in figures 1-3 and column 7, lines 20-34 and column 14, lines 13-18, UTSUNOMIYA et al teaches the feature of using adhesive agent in optical disk for adhering two layers ( the adhesive agent are old and widely used in optical recording medium, the adhesive agent can be used on any layers at any suitable positions for adhering the layers together to form a solid optical storage medium, further, the

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adhesive may be a hot melt adhesives, a UV curing adhesive, or a room temperature curing adhesive, or alternatively, a pressure sensitive adhesive, etc., ). Therefore, one of ordinary skill in the art at the time of the invention was made would have been motivated to use an organic recording layer and adhering the light-transmitting layer to dielectric layer in UTSUNOMIYA et al's optical disk as claimed.

As to claim 2, UTSUNOMIYA et al discloses all the subject matter claimed ( see column lines 54-58 for wavelength of 100nm to 5000nm ), except to specifically show that the reflectance of the beam 15% to 25% at initial condition ( before data is recorded ) and is 0% to 10% after data is record. However, the reflectance of the beam irradiates on the optical disk at 15% to 25% at initial condition ( before data is recorded ) and at 0% to 10% after data is record is standard conditions of next generation of high density optical disk. Therefore, one of ordinary skill in the art at the time of the invention was made would have been motivated to use an optical disk with the reflectance of 15% to 25% at initial condition ( before data is recorded ) and at 0% to 10% ( after data is record ) in order to increase the density of the optical recording medium.

7) Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

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8) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner TAN X. DINH whose telephone number is (571)272-7586. The examiner can normally be reached on Monday-Friday from 8:00AM to 5:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAN DINH  
PRIMARY EXAMINER

May 11, 2005